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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,496	08/29/2000	Dale E Fiene		8592

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Algonquin, IL 60102

EXAMINER

PAYNE, SHARON E

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/650,496

Applicant(s)

FIENE, DALE E

Examiner

Sharon E. Payne

Art Unit

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-- Th MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-6, 14-19 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-13 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's arguments have been reviewed and are rendered moot by the following restriction requirement.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-6 and 14-19, drawn to an electrical connector, classified in class 439, subclass 226.
- II. Claim 7-13 and 20-26, drawn to a lamp enclosure means, classified in class 362, subclass 133.
- III. Claim 27, drawn to a transformer supply circuit, classified in class 315, subclass 276.

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because another electrical connector may be used. The subcombination has separate utility such as an electrical connector for another luminaire.

Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP §

806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because a different transformer may be used in the luminaire. The subcombination has separate utility such as a transformer for another luminaire.

The Applicant has elected Group II (claims 7-13, 20-26) with traverse. Those claims are examined below.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the insulation-displacement connector (claims 24 and 25) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 26 is objected to because of the following informality: the phrase "there to" in line 3 should be one word. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. Claims 7-13 and 20-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "high-frequency" in claims 7, 20, 23, 24 and 26 is a relative term which renders the claim indefinite. The term "high-frequency" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 8 is indefinite for reciting the limitation "wherein the luminaire can be mounted" A claim should specify what exactly the invention is, not what it can be. The word "can" used in this sense is not appropriate claim language.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are the placement of the enclosure within the luminaire and its relationship to the other elements of the luminaire.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationship is the placement of the support bracket.

Claim 20 recites the limitation "the interconnecting wiring" in lines 4-6. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 is indefinite for reciting the limitation "includes a mounting tab." The phrase "mounting tab" is not defined. For purposes of this office action, the phrase "mounting tab" is assumed to refer to the mounting base.

Claim 23 recites the limitation "the interconnection between the input terminals and the ballasting circuitry" in lines 8 and 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "the interconnection between ballasting circuitry and the output terminals" in lines 9 and 10. There is insufficient antecedent basis for this limitation in the claim.

Claims 24 and 25 are indefinite for referring to the use of an insulation-displacement connector. There is no support in the specification for the content of these claims. If the Applicant disagrees, the appropriate page and line number(s) should be cited.

Claim 25 recites the limitation "the insulation-displacement connector" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: 1) the placement of the luminaires with respect to the cable; 2) the relationship between the high-frequency power source and the interconnecting cable; and 3) the relationship between high-frequency power source and the luminaires.

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Claim 26 is indefinite for reciting the limitation "the system further characterized in that multiple luminaires can be powered" in line 4. A claim should specify what exactly the invention is, not what it can be. The word "can" used in this sense is not appropriate claim language.

Claim 26 is indefinite for reciting the limitation "without cutting the interconnecting cable" in line 5. The contacts cut into the insulating portion of the power cord to form an electrical connection with the wire, so it is not clear what is meant by this claim. For purposes of this office action, it is assumed that "cutting" means to cut the cable into two separate pieces as opposed to merely cutting into the insulating portion of the cable.

Claims 9-11 and 22 are necessarily included due to their dependency.

6. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not say how to make the power factor of the power being drawn by the luminaire greater than 80%.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 7, 8, 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Connan (U.S. Patent 3,609,643).

Regarding claim 7, Connan discloses a luminaire suitable for connection to and being powered from a high-frequency power source. The luminaire includes a pair of input terminals (first and second contact members, reference numbers 22 and 24), the input terminals being located in a channel (walls, reference numbers 32 and 34, Figs. 1 and 2), the channel being of such a design as to receive an interconnecting cord (electric power cord assembly, reference number 14) comprising two parallel conductors encased within and separated from each other by a common insulating sheath (Fig. 1).

Concerning claim 8, the claim consists of process limitations that are not given patentable weight. See M.P.E.P. 2113.

Regarding claim 9, the claim consists of process limitations that are not given patentable weight. See M.P.E.P. 2113.

Concerning claim 12, Connan discloses an enclosure which is non-conductive (sleeve element, reference number 26).

9. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Nilssen (U.S. Patent 4,631,648).

Regarding claim 26, Nilssen discloses a modular suspended ceiling lighting system. The lighting system includes a high-frequency power source (abstract), an interconnecting cable (track conductor, reference character TC) and multiple luminaires (reference characters SFLF), the interconnecting cable being supplied with no luminaires connected thereto (inherent), the system further characterized in that multiple luminaires can be powered from the same interconnecting cable (TC) without cutting the interconnecting cable (Figs. 1 and 2). Supplying the interconnecting cable without luminaires being connected thereto is considered to be inherent, because the track conductors would naturally be supplied without anything attached to them.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Connan in view of Smallwood et al. (U.S. Patent 5,485,057).

Regarding claim 10, Connan does not disclose a power factor of the power being drawn by the luminaire being greater than 80%. Smallwood et al. discloses a power factor of 99%.

It would have been obvious to one of ordinary skill in the art to use the techniques disclosed in Smallwood et al. to achieve the desired power factor in the apparatus of Connan to load the AC source.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Connan in view of Erikson (U.S. Patent 729,303).

Regarding claim 11, Connan does not disclose a receptacle facing opposite directions and located on substantially the same axis. Erikson discloses two lamp sockets each having a receptacle capable of receiving a single ended lamp, the receptacles facing opposing directions and also located on substantially the same axis (Fig. 1).

It would have been obvious to one of ordinary skill in the art to use the receptacle of Erikson in the Connan apparatus to make the lamps face in opposing directions.

13. Claims 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smallwood in view of Sakakibara et al. (U.S. Patent 5,796,210)

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Regarding claim 20, Smallwood et al. discloses a pair of high-frequency input terminals (reference number 10) and a high-frequency ballasting circuit (Fig. 3 as a whole) and a lamp socket for a single-ended lamp (Figs. 2A and 2B). Smallwood et al. does not disclose the enclosure described in the claim.

Sakakibara et al. discloses an enclosure completely enclosing the high-frequency ballasting circuitry, the interconnecting wiring between the high frequency input terminals and the high-frequency ballasting circuit, and the interconnecting wiring between the high-frequency ballasting circuit and the lamp socket for a single-ended lamp. (See the outer enclosure in Figs. 1 and 2, which encloses everything.)

It would have been obvious to one of ordinary skill in the art to use the enclosure of Sakakibara et al. in the apparatus of Smallwood et al. for enclosing the elements.

Concerning claim 23, Smallwood et al. discloses a pair of input terminals (reference number 10), a ballasting circuit (Fig. 3 as a whole), a socket with output terminals that is capable of receiving, supporting and making electrical connections to a single-ended lamp (Figs. 2A and 2B); the input to the ballasting circuit being connected to the pair of input terminals (Fig. 3), the output of the ballasting circuit being connected to the output terminals within the socket (Fig. 2B), and the ballasting circuit being capable of properly igniting and powering a gas discharge lamp when provided with a high-frequency voltage on the pair of input terminals (abstract). Smallwood et al. does not disclose the enclosure as described in the claim.

Sakakibara et al. discloses an enclosure completely encapsulating the ballasting circuitry, the interconnection between the input terminals and the ballasting circuitry, the interconnection between the ballasting circuitry and the output terminals of the socket and the

portion of the output terminals to which the ballasting circuitry connects. (See the outer enclosure in Figs. 1 and 2, which encloses everything.)

14. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smallwood et al. in view of Sakakibara et al. as applied to claim 20 above, and further in view of Altman et al. (U.S. Patent 6,217,190 B1).

Regarding claim 21, Smallwood et al. does not disclose the mounting tab. Altman discloses a mounting tab having holes capable of receiving screws (column 5, lines 25-30). The rest of the claim consists of functional language that is not given patentable weight. See M.P.E.P. 2114.

It would have been obvious to one of ordinary skill in the art to use the mounting tab of Altman et al. in the apparatus of Smallwood et al. for attaching the ballast.

15. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smallwood et al. in view of Sakakibara et al. as applied to claim 20 above, and further in view of Herst et al. (U.S. Patent 5,276,597).

Regarding claim 22, Herst et al. discloses a reflector (reference number 99) installed between the ballasted socket assembly (reference number 103) and the underside of the cabinet or shelf (Fig. 4).

It would have been obvious to one of ordinary skill in the art to use the reflector arrangement taught in Herst et al. in the apparatus of Smallwood et al. to form an easily-installed subassembly and to reflect light.

16. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smallwood et al. in view of Sakakibara et al. as applied to claim 23 above, and further in view of Echito (U.S. Patent 6,390,652).

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Regarding claim 24, Smallwood et al. does not disclose an insulation-displacement connector connecting the input terminals to the high-frequency voltage source. Echito discloses an insulation-displacement connector being used for electrical connection purposes (abstract).

Using the insulation-displacement connector to connect a high-frequency voltage source to an input terminal is considered to be an obvious variation in design. Since the insulation-displacement connector is well known in the art, it would have been obvious to one of ordinary skill in the art to use an insulation-displacement connector in the Smallwood et al. reference for connecting the power source to the input terminal.

Concerning claim 25, Smallwood et al. does not disclose an insulation-displacement connector through which the wire can be run in any one of four possible orientations.

Running the wire through the insulation-displacement connector as described in the claim is considered to be an obvious variation in design. Since the insulation-displacement connector is well known in the art, it would have been obvious to one of ordinary skill in the art to run the wire through it as desired for conducting electricity to the appropriate place.

Allowable Subject Matter

17. Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose a luminaire with a single-ended lamp having a support bracket provided with a recess for an interconnecting cord.

Conclusion

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19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Belfer discloses a modular suspended ceiling and lighting system.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon E. Payne whose telephone number is (703) 308-2125.

The examiner can normally be reached on regular business hours.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

sep
August 26, 2002



ALAN CARIASO
PRIMARY EXAMINER